



May 2010

## **Bachelor of Arts in Sustainable Urban Development University of Washington Tacoma**

### **Introduction**

The University of Washington Tacoma (UWT) seeks approval to establish a Bachelor of Arts in Sustainable Urban Development degree program. This interdisciplinary program would be housed in the Urban Studies Program but would draw on courses and faculty from the Interdisciplinary Arts and Sciences and Environmental Sciences programs.

The proposed two-year, 72-credit program would enroll 20 students (16 FTE) in fall 2010, and 80 students (66 FTE) by fall 2013. It would generate 45 graduates by its fifth year and each year thereafter. Most program candidates will be transfer students, admitted as juniors, who have completed most of their general education requirements.

UWT believes this would be the first program of its kind in the United States. Typically this program is offered as a minor or concentration within either urban planning or environmental studies.

UWT seeks approval for this program to respond to

- State and local policy initiatives calling for significant “greening” of urban development in the South Puget Sound region;
- UWT’s growth plans and the need to create innovative new programs and majors, rather than simply expand existing ones; and
- Unmet student demand for this type of degree offering.

The program will be supported with state FTE resources but requires no additional infrastructure to deliver. Although initially no additional faculty will be hired for the program, a half-time student advisor will be hired, increasing to full-time in the third year.

### **Relationship to Institutional Role and Mission**

UWT states the program would support the university’s strategic plan, which calls for the transition from a branch campus to a fully developed metropolitan research university. It also would help the institution meet its responsibility to provide society with well-trained students whose knowledge and skills can guide urban change towards a more sustainable socio-natural environment.

UWT acknowledges that many institutions offer courses and degree options studying various aspects of sustainability, but few offer an undergraduate degree in sustainable development. In an appendix to the proposal, UWT identifies nine organizations and political jurisdictions engaged in sustainability activities in the South Puget Sound region.

## **Diversity**

To ensure diversity, the program will focus on the recruitment and retention of students and on efforts to enrich the on-campus academic experience. Program faculty and staff plan to conduct outreach and consultations with the Latino Student and Black Student Union organizations at UWT, as well as with civic organizations serving under-represented student groups and families in the South Sound Region.

Recruitment will focus on inner-city high schools with large numbers of under-represented students, including Oakland, Mt. Tahoma, Lincoln, and Foss high schools. Similar outreach activities will be conducted with area community and technical colleges and student groups on those campuses.

## **Program Need**

The proposal notes that urban communities world-wide increasingly must resolve issues concerning transportation management, drinking water supply, energy, housing, and green space preservation. Additionally, there is a new emphasis on sustainable construction and the need for a common measure of sustainability in urban development. Policy decisions at the state and local level are accelerating demand for sustainability skills and knowledge, including the state's Evergreen Jobs Initiative and Tacoma's participation in the U.S. Conference of Mayors Climate Protection Agreement.

The proposal also cites UWT's growth plans as another reason to create new programs such as this one. Between now and 2015, UWT plans to double its current student population, adding more than 3,000 upper-division FTEs and 400 graduate FTEs. To meet this challenge, new academic programs and majors are needed that prepare students for rewarding careers and drive the economy forward. The South Sound population is growing at 1.5 percent each year and Pierce County will reach a million inhabitants by 2020. Continued growth in the region will put more pressure on fragile ecosystems, increasing the need for knowledge and skills in sustainable urban development.

UWT draws its students primarily from local high schools and seven community and technical colleges in the region. UWT established the Urban Studies program in 2001, and in four years, student enrollment exceeded initial projections by 50 percent (110 majors in 2005). UWT has noticed that many Urban Studies students are taking courses or minor in Environmental Science, and vice versa, as students find ways to craft their own program of study in sustainable urban development. The proposed program would formalize this informal sustainably urban development pathway.

UWT conducted a survey of Urban Studies students to document interest in a new Sustainable Urban Development program. The results showed that nearly a third of respondents were interested in the new degree option, and about a quarter of current Urban Studies students may switch to Sustainable Urban Development if it is offered. This suggests the new program would complement the existing Urban Studies program.

Overall enrollment in urban environment programs at UWT has risen substantially since 2002, from 507 students to 595 students (a 17 percent increase). This increased student interest in the subject area helps justify the creation of a new degree option for these students.

Graduates of the Sustainable Urban Development program would be likely to obtain employment in the public and non-profit sectors and also in real estate. Letters of support from employers indicate they are likely to hire graduates as urban planners or planning assistants, program developers, managers or directors, community engagement managers, project managers, sustainability coordinators, environmental and natural resource specialists, and environmental systems managers. The organizations responding included Pierce County, the Cities of University Place and Tacoma, Pierce County Housing Authority, the Cascade Land Conservancy, Puget Sound Regional Council, Metro Parks Tacoma, and ESRI (a GIS software company).

A Web survey of regional employers who were given information on the proposed program's learning objectives and a curriculum overview yielded 30 valid responses. Of these, 83 percent indicated the program was "a strong addition to the undergraduate majors available at UWT." No responses indicated that it was not a useful course of study. Two-thirds of the respondents described 'planner' as the type of job most likely to be filled by graduates. Others identified jobs such as project coordinator/manager, environmental specialist, policy analyst, research associate, and community outreach coordinator.

Total employment in Washington is expected to grow by 10 percent between 2009 and 2016. Demand in the target occupations of this program is expected to increase even more: 15 percent for urban planners, 20 percent for environmental scientists and specialists, and 17 percent for social scientists and related workers.

## **Program Description**

The program's learning objectives are clearly stated and appropriate.

- Demonstrate an awareness of the interconnectedness of the environment, economics, and social equity, and their importance in creating sustainable urban centers.
- Utilize spatial and digital technologies in the presentation and analysis of urban sustainability issues.
- Understand the impacts of urban development on all parts of the urban setting and sustainability.
- Demonstrate effectiveness in written and oral communications skills.
- Apply innovative approaches to complex problems involving a variety of issues.

The 72-credit program comprises nine required courses (42 total credits), 5 credits of statistics, 5 credits of capstone seminar, and 20 credits of planning/policy/environmental electives. The electives are selected by the student with the assistance of the program's advisor.

The required core courses are Introduction to Sustainability, Sustainable Urban Development Policies, Global Urban Systems and Sustainability, Urban Ecology, The City and Nature, Maps and GIS, Community and Economy, Social Justice and Urban Sustainability, and Assessment and Evaluation of Urban Sustainability. These courses are sequenced in a manner that allows for students to build on previously introduced concepts.

With the inclusion of the statistics requirement and assessment and evaluation core course, graduates of the program should be well-prepared for entry into the following Washington graduate/professional programs:

- Master of Public Affairs – Washington State University
- Master of Public Administration – Seattle University
- Master of Science in Geography – Western Washington University
- Master of Urban Design and Planning – University of Washington
- Master of Arts in Geography – University of Washington
- Master of Science in Real Estate – University of Washington
- Master of Public Administration – University of Washington
- Master of Landscape Architecture – University of Washington
- Master of Urban and Regional Planning – Eastern Washington University
- Master of Arts in Environment and Community – Antioch University
- Master of Arts in Interdisciplinary Arts and Sciences – University of Washington Tacoma
- Master of Policy Studies – University of Washington Bothell

UWT notes that this program is different from more descriptive and analytical environmental studies and urban planning programs.

*“It emphasizes the integral connection of the city to the natural systems of its region and presents environmental science as a revelatory and organizing mechanism within systems of urban governance; it examines the dynamic political interests that have generated recent support of urban sustainability initiatives; and it cultivates a willingness to ask and answer questions such as ‘what is being accomplished?’ and ‘who benefits?’ when evaluating specific practices and projects.”*

The program assessment plan calls for quarterly student course evaluations, student and peer evaluations of teaching, focus groups with students, exit surveys of graduates, and focus groups with alumni and employers. Students will submit a portfolio during their final term comprising design projects and/or examples of visual presentations of geo-spatial data, along with a reflective essay on urban sustainability.

## Program Costs

Program staff include a director/faculty (0.3 FTE) and an additional 1.5 FTE of faculty teaching core courses and electives. The program will also require 0.3 FTE for clerical staff and 1.0 FTE for a program advisor. Only the program advisor would represent a new hire; the other staff would be reassignments. By full enrollment in the fifth year, program costs are estimated at \$298,000 or \$4,500/FTE (well below the 2005-06 *Cost Study* average direct cost per AAFTE figure for UWT social science programs of \$7,682). Total program revenues are estimated at \$689,000 or \$391,000 in excess of total costs.

## External Review and Comments

The program was reviewed by Dr. Ali Modarres, professor in the Department of Geography and Urban Analysis at California State University, Los Angeles. Dr. Modarres said he thought the program, as designed and described, had “a great chance of succeeding in meeting its established goals.” It would be attractive to both students and the prospective employers of program graduates, he noted.

Dr. Modarres also said the core courses should be described in greater detail. This was done in the proposal submitted to the Higher Education Coordinating Board. He recommended a course on assessment and evaluation be required; UWT responded by including a five-credit assessment and evaluation course in the required course list.

Finally, Dr. Modarres recommended course sequencing and learning outcomes be time specific (“by the end of the first year, students should be able to . . .”). He suggested the proposal include a recommended sequence of courses by quarter. UWT addressed these concerns in subsequent revisions of the proposal, which included course sequence progression tables.

Dr. Peter Hall, Associate Director of the Centre for Sustainable Communities at Simon Fraser University in Vancouver, British Columbia, conducted the second review. Dr. Hall offered “very strong support” for the timely proposal stating that it would be a “leading addition to this emerging field.” He commended the program for responding to the need for undergraduate programming in the field, the quality of its faculty, its focus on linking environmental science with urban development, and the curriculum design.

Dr. Hall recommended strengthening the culminating experience. Under the program, students would select one of three five-credit options: a community internship, capstone seminar, or case study. Dr. Hall recommended increasing this to two of the three options. In response, UWT declined, citing the availability of faculty to support and monitor these culminating experiences (given the intention not to hire new faculty for the program) and the desire to keep down the total number of program credits.

Dr. Hall also recommended adding a course in economic development or urban and regional economics to the list of electives. In response, UWT is now offering a course in Community and Economy which explores connections between economic practices and community development, and has made the course a part of the required core course sequence.

## **Staff Analysis**

The proposed program would support the UWT's mission and would help the institution meet its expansion goals. The proposal makes a strong case for such a program, noting that sustainable development is a policy focus for both state and local government. Also, there can be little doubt from the evidence provided of significant student interest in the new program, which would complement existing Urban Studies and Environmental Sciences programs.

UWT claims this is a new type of baccalaureate program not being offered elsewhere in the country. It is laudable that UWT wants to be out in front forging a new academic path. The proposed curriculum appears rigorous and well-planned, a conclusion supported by both employer support letters and external reviewer critiques. Program costs also appear reasonable in comparison to similar programs.

After several revisions of the proposal, HECB staff believe UWT has correctly identified the range of target occupations for this degree. In some instances, program graduates may qualify for junior-level planning positions, but most graduates will be well prepared for employment and able to find employment in public and non-profit agencies as program coordinators/managers, environmental specialists, and other related occupations. UWT has done excellent work to identify employers in the area who have shown a high level of interest in the program, and in demonstrating need and demand for program graduates.

Staff also believe that program graduates will be well positioned to apply for and receive admittance to graduate-level programs in environmental science and urban planning. The proposed curriculum articulates well with programs of this type in Washington.

## **Staff Recommendation**

After careful review of the proposal and supporting materials, staff recommend Board approval of the UWT Bachelor of Arts in Sustainable Urban Development program.

**RESOLUTION NO. 10-09**

**WHEREAS,** The University of Washington Tacoma proposes to offer a Bachelor of Arts in Sustainable Urban Development; and

**WHEREAS,** The program would respond to student, employer, and community need, providing well-trained students whose knowledge and skills guide urban change towards a more sustainable socio-natural environment; and

**WHEREAS,** The program's students would study a rigorous curriculum, taught by excellent faculty and leading to graduate education in environmental studies and urban planning or employment in critical positions in the local community; and

**WHEREAS,** The program has support from external reviewers; and

**WHEREAS,** The program would not unnecessarily duplicate existing programs; and

**WHEREAS,** The program would be offered at a reasonable cost;

**THEREFORE, BE IT RESOLVED,** That the Higher Education Coordinating Board approves the Bachelor of Arts in Sustainable Urban Development at the University of Washington Tacoma effective May 13, 2010.

Adopted:

May 13, 2010

Attest:

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Jesus Hernandez, Chair

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Earl Hale, Vice Chair